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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/733,064	12/11/2003	Alexander Sulakvelidze	1799USD1	7824

43896 7590 10/04/2006

ECOLAB INC.  
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EAGAN, MN 55121

EXAMINER

KINSEY, NICOLE

ART UNIT PAPER NUMBER

1648

DATE MAILED: 10/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/733,064

Applicant(s)

SULAKVELIDZE ET AL.

Examiner

Nicole E. Kinsey, Ph.D.

Art Unit

1648

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 5/28/2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 40-48 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 40-48 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>12/11/2003</u> . | 6) <input type="checkbox"/> Other: _____  |

***Priority***

The disclosure is objected to because of the following informalities: The specification was amended (12/11/2003) to update the priority information for the instant application. This information should be updated again to include the patent number for application number 09/757,687. In addition, the application data sheet states the incorrect parent application number for the instant application.

Appropriate correction is required.

***Specification***

The use of the trademarks NISAPLIN, LYSOL, 409, WAGNER and SAS/STAT has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner, which might adversely affect their validity as trademarks.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 40-42 are rejected under 35 U.S.C. 102(b) as being anticipated by Taylor et al. (U.S. Patent No. 2,851,006).

Taylor et al. discloses submerging fertilized eggs infected with Salmonella into a fluid containing bacteriophages to free the eggs of bacteria (see entire document). Taylor et al. also discloses using a cocktail of different phages (col. 2, lines 25-44).

Claims 46-48 are rejected under 35 U.S.C. 102(b) as being anticipated by Day et al. (U.S. Patent No. 4,851,240).

Day et al. discloses liquid preparation of at least two varieties of bacteriophage, which may be a formulation of phage in food or drinking water, for administering to livestock (see col. 5, line 41 to col. 6, line 5). It is common knowledge that chickens are livestock (The Cambridge Dictionary of American English defines livestock as "animals kept on a farm, such as cows, sheep, chickens, and pigs."). The phage formulations are for the prevention and treatment of microbial infestations.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 43-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Merrill et al. (U.S. Patent No. 5,811,093) in view of Taylor et al. (U.S. Patent No. 2,851,006).

Merril et al. discloses topically treating animals (e.g., man, domestic pets, livestock, pisciculture, and animals in zoos and aquatic parks) with composition comprising bacteriophages to kill bacteria (see col. 9, line 42 to col. 11, line 3). It is common knowledge that chickens, including newly hatched chicks, are livestock (The Cambridge Dictionary of American English defines livestock as "animals kept on a farm, such as cows, sheep, chickens, and pigs."). The phage formulations are for the prevention and treatment of bacterial infection in humans and animals.

Merril et al. does not disclose the use of a cocktail of phages. However, Taylor et al. discloses using a cocktail of different phages to assure the destruction of all possible species of Salmonella (col. 2, lines 25-44).

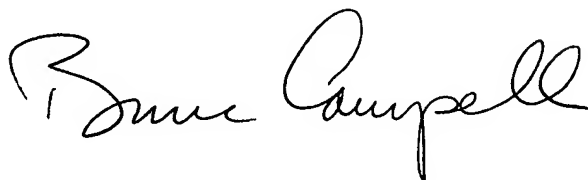
It would have been obvious to one of ordinary skill in the art to modify the methods taught by Merrill et al. to use a cocktail of phages. One would have been motivated to do so, given the suggestion by Taylor et al. that cocktails of phages should be used to assure the destruction of all possible species of bacteria, namely Salmonella. There would have been a reasonable expectation of success given the knowledge that phages kill bacteria and also given the knowledge that more than one strain or species of bacteria can contaminate/infect an animal. Thus, the invention as a whole was clearly prima facie obvious to one of ordinary skill in the art at the time the invention was made.

No claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicole E. Kinsey, Ph.D. whose telephone number is (571) 272-9943. The examiner can normally be reached on Monday through Friday from 8:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bruce Campell can be reached on (571) 272-0974. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Nicole E Kinsey, Ph.D.  
Examiner  
Art Unit 1648

A handwritten signature in black ink, reading "Bruce Campell". The signature is written in a cursive style with a large, stylized "B" and "C".

**BRUCE R. CAMPELL, PH.D**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 1600**